

DETAILED ACTION

1. Claims 1-5, 18-28, and 30 are pending.
2. Response filed 04/08/2008 has been received and considered.
3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Aaron F. Bourgeois on 05/20/2008 and 05/27/2008.

The application has been amended as follows:

18. (Currently Amended) A computer-readable storage medium whose contents cause a transmitter in a communications system to perform a method for synchronizing encryption and/or decryption of transmitted data, the method comprising creating a packet for transmission over a link, including:

sending messages for transmission in blocks of data from a central processing unit ("CPU") to a communication link digital signal processor;

detecting a particular unencrypted control message within unencrypted control data that passes unencrypted through an associated control channel for initiating encryption, wherein the particular control message is used according to

wireless communication protocol to indicate that a process of establishing a wireless communication connection is being completed;

in response to detecting, determining a size of the control data, loading the size of the control data into a counter, wherein the counter decrements when each portion of the control data is sent;

when the counter reaches zero, initiating an encryption and/or decryption synchronization process within the associated control channel, including generating a state box using an encryption key; and

encrypting transmissions following the control message for transmission for the packet.

19. (Currently Amended) The computer readable storage medium of claim 18, wherein the method further comprises creating a control message packet for sending to the CPU, including,

receiving an airlink packet;

parsing the airlink packet to separate payload data from control data;

detecting a particular control message in the airlink packet;

in response to detecting, initiating an encryption and/or decryption synchronization process, including generating a state box using an encryption key; and decrypting data following the particular control message.

20. (Currently Amended) The computer readable storage medium of claim 18, wherein the packet comprises the encryption key.

21. (Currently Amended) The computer readable storage medium of claim 18, wherein initiating the encryption and/or

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decryption synchronization process further includes changing the encryption key according to a predetermined algorithm, and operating on the state box using the changed encryption key.

22. (Currently Amended) The computer readable storage medium of claim 18, wherein the method is performed at an associated control channel level of processing.

23. (Currently Amended) The computer readable storage medium of claim 18, wherein the method is performed each time a base station participates in setting up an airlink channel.

24. (Currently Amended) The computer readable storage medium of claim 18, wherein the particular control message is a link control channel ("LCC") message that is a "set asynchronous balance mode" ("SABM") message or a "set asynchronous balance mode unnumbered acknowledge" ("SABMUA") message.

25. (Currently Amended) An apparatus for synchronizing an encryption and/or decryption process in a wireless communication network, comprising:

at least one digital signal processing means;

at least one central processing means; and

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encryption synchronization means configured to detect a particular unencrypted control message in an unencrypted control data portion of a data transmission,

wherein the particular unencrypted control message is used according to a wireless communication protocol to indicate that a process of establishing a wireless communication and, in response, initiate an encryption and/or decryption process,

wherein the particular unencrypted control message is detected prior to the transmission of telephony data, ~~and~~

wherein ~~further~~ the encryption synchronization means and the encryption and/or decryption process operates at an associated control channel level in the wireless communication network,

wherein, based on the detection of the particular unencrypted control message, the encryption synchronization means determines a size of the control data, loads an encryption synchronization counter with the size of the control data, initializes the encryption synchronization counter, and decrements the encryption synchronization counter when each portion of the control data is sent, and

wherein, when the encryption synchronization counter is decremented to zero, the encryption synchronization means

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initializes the cryptosystem using a key, encrypts the
payload data, and creates an encrypted airlink packet for
transmission over an airlink .

Allowable Subject Matter

4. Claims 1-5, 18-28 and 30 are allowed.

5. The following is an examiner's statement of reasons for allowance: The prior art fails to teach or disclose detecting a particular control message wherein the particular control message indicates that a process of establishing a wireless communication connection is being completed wherein, based on the detection of the particular unencrypted control message, the encryption synchronization means determines a size of the control data, loads an encryption synchronization counter with the size of the control data, initializes the encryption synchronization counter, and decrements the encryption synchronization counter when each portion of the control data is sent, and wherein, when the encryption synchronization counter is decremented to zero, the encryption synchronization means initializes the cryptosystem using a key, encrypts the payload data, and creates an encrypted airlink packet for transmission over an airlink.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PYZOCHA whose telephone number is (571)272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2137